

# CSC2001F 2023 Assignment 1 Report

## 1. Classes

- **User:** this class store the account name, the profile description, and a list of all the posts (Post) for each person. This class implements the “Comparable” interface to define the natural ordering of each object (User).  
It also has some useful methods such as getter, addPost (to add a post to a user), printPosts (to print a list of all the posts for one user, most recent first).
- **Post:** this class store the video title, video file name and the number of likes for each post that can be added to a user.
- **BinaryNode:** this class define the nodes for the binary tree which has a value “data” of type T (User). The tree also has a left and right node defined.
- **Bts:** this class (Binary Search Tree) define the binary tree with additional properties:  
All nodes in the left subtree are less inferior the node. And all the nodes in the right subtree are superior to the node. It also defines some methods such as:  
Insert method which take the value “data” as a parameter and insert that value in the binary tree using those properties.
- **App:** this class contains the main method to run the application.  
The application includes the following functionalities:  
Find the profile description for a given account.  
List all accounts (in alphabetical order).  
Create an account.  
Delete an account.  
Display all posts for a single account (with newest posts first).  
Add a new post for an account.  
Load a file of actions from disk and process this in sequence.  
The application will continue to run until the user decide to quit.

## 2. Test values

- Normal inputs

```
Hi, Welcome to ChikChok.

Please choose one option from the menu below:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Please enter a number from the menu list:      3

Enter the account name: Chiko
Enter the account description: Best student
Account added successfully!

Please choose one option from the menu below:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Please enter a number from the menu list:      1

Enter the account name: Chiko
The profile description for Chiko is: Best student

Please choose one option from the menu below:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
Please enter a number from the menu list:      3
```

Enter the account name: Damberd  
Enter the account description: chiko's middle name  
Account added successfully!

Please choose one option from the menu below:  
1. Find the profile description for a given account  
2. List all accounts  
3. Create an account  
4. Delete an account  
5. Display all posts for a single account  
6. Add a new post for an account  
7. Load a file of actions from disk and process this  
8. Quit  
Please enter a number from the menu list: 3

Enter the account name: Joseph  
Enter the account description: chiko's other name. Yeah I know!  
Account added successfully!

Please choose one option from the menu below:  
1. Find the profile description for a given account  
2. List all accounts  
3. Create an account  
4. Delete an account  
5. Display all posts for a single account  
6. Add a new post for an account  
7. Load a file of actions from disk and process this  
8. Quit  
Please enter a number from the menu list: 2

Please see the list of all the account below:  
Chiko  
Damberd  
Joseph  
Kasongo

```
Please choose one option from the menu below:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
```

```
Please enter a number from the menu list:      4
```

```
Enter the account name to be deleted:  Joseph
Account deleted successfully!
```

```
Please choose one option from the menu below:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
```

```
Please enter a number from the menu list:      2
```

```
Please see the list of all the account below:
```

```
Chiko
Damberd
Kasongo
```

```
Please choose one option from the menu below:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
```

```
Please enter a number from the menu list:      6
```

```
Enter the account name: Chiko
Enter the video title:  CSC2001F LG01 09:00 1
Enter the video file name:      Lecture Videos
Enter the number of likes:      1 845 867
```

Please choose one option from the menu below:

1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit

Please enter a number from the menu list: 5

Enter the account name: Chiko

Title:Welcome to my YouTube channel

Video: Youtube videos

Likes: 8

Title:How to read a file in Java

Video: YouTube videos

Likes: 654 876 867

Title:5 minutes craft

Video: coolVideos

Likes: 1

Title:CSC2001F LG01 09:00 1

Video: Lecture Videos

Likes: 1 845 867

```
Enter the location of the file name: C:\Users\LENOVO\workspace\A4 BST\src\dataset.txt
File added successfully!
```

```
Please choose one option from the menu below:
```

1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit

```
Please enter a number from the menu list: 2
```

```
Please see the list of all the account below:
```

```
4-LOM0
4-LOM1
4-LOM2
4-LOM3
4-LOM4
4-LOM5
4-LOM6
4-LOM7
4-LOM8
4-LOM9
AaylaSecura0
AaylaSecura1
AaylaSecura2
AaylaSecura3
AaylaSecura4
AaylaSecura5
AaylaSecura6
AaylaSecura7
AaylaSecura8
AaylaSecura9
AdmiralAckbar0
AdmiralAckbar1
AdmiralAckbar2
AdmiralAckbar3
AdmiralAckbar4
AdmiralAckbar5
AdmiralAckbar6
AdmiralAckbar7
AdmiralAckbar8
AdmiralAckbar9
AdmiralThrawn0
AdmiralThrawn1
AdmiralThrawn2
AdmiralThrawn3
```

And the list goes on ....

```
ZayneCarrick8
ZayneCarrick9
Zuckuss0
Zuckuss1
Zuckuss2
Zuckuss3
Zuckuss4
Zuckuss5
Zuckuss6
Zuckuss7
Zuckuss8
Zuckuss9
```

```
Please choose one option from the menu below:
```

1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit

```
Please enter a number from the menu list: 8
```

```
Bye! Hope to see you again!
```

- Invalid inputs

```
Please choose one option from the menu below:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
```

```
Please enter a number from the menu list:      70
```

```
Error!!! Please enter a number between 1 and 8.
```

```
Please choose one option from the menu below:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
```

```
Please enter a number from the menu list:      k
```

```
Error!!! Please enter a number between 1 and 8.
```

```
Please choose one option from the menu below:
1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit
```

```
Please enter a number from the menu list:      7
```

```
Enter the location of the file name:    I don't know
```

```
An error has occurred.
```

```
File not found: I don't know (The system cannot find the file specified)
```

- Boundary inputs

```
Hi, Welcome to ChikChok.
```

```
Please choose one option from the menu below:
```

1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit

```
Please enter a number from the menu list:      1
```

```
Enter the account name: dk
```

```
Account not found.
```

```
Please choose one option from the menu below:
```

1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit

```
Please enter a number from the menu list:      4
```

```
Enter the account name to be deleted:  dk
```

```
Operation unsuccessful! Account does not exist.
```

```
Please choose one option from the menu below:
```

1. Find the profile description for a given account
2. List all accounts
3. Create an account
4. Delete an account
5. Display all posts for a single account
6. Add a new post for an account
7. Load a file of actions from disk and process this
8. Quit

```
Please enter a number from the menu list:      6
```

```
Enter the account name: dk
```

```
Account not found.
```



### 3. Git usage summary

```
ksnjos004@nightmare:~/Documents/testGit$ git log | (ln=0; while read l; do echo $ln\: $l; ln=$((ln+1)); done) | (head -10; echo ...; tail -10)
0: commit 90eb26e92226a15feeba6bbaaaaf266c92544c1e
1: Author: Chiko <ksnjos004@nightmare.cs.uct.ac.za>
2: Date: Wed Apr 19 20:01:28 2023 +0000
3:
4: final version
5:
6: commit ade7ad54a9872fc42a21cf5a0803419503dbcba0
7: Author: Chiko <ksnjos004@nightmare.cs.uct.ac.za>
8: Date: Wed Apr 19 19:07:43 2023 +0000
9:
...
10: 2nd version
11:
12: commit e2ebdf0518ff71bab8c9f5f663fe8919137dbb1d
13: Author: Chiko <ksnjos004@sl-dual-273.cs.uct.ac.za>
14: Date: Wed Apr 19 16:58:33 2023 +0200
15:
16: first version
```

```
0: commit 90eb26e92226a15feeba6bbaaaaf266c92544c1e
1: Author: Chiko <ksnjos004@nightmare.cs.uct.ac.za>
2: Date: Wed Apr 19 20:01:28 2023 +0000
3:
4: final version
5:
6: commit ade7ad54a9872fc42a21cf5a0803419503dbcba0
7: Author: Chiko <ksnjos004@nightmare.cs.uct.ac.za>
8: Date: Wed Apr 19 19:07:43 2023 +0000
9:
...
10: 2nd version
11:
12: commit e2ebdf0518ff71bab8c9f5f663fe8919137dbb1d
13: Author: Chiko <ksnjos004@sl-dual-273.cs.uct.ac.za>
14: Date: Wed Apr 19 16:58:33 2023 +0200
15:
16: first version
```